

**To the Claims:**

**Please cancel Claims 2, 16, 26-35, 40-45, and 47 without prejudice or disclaimer, and amend Claims 3, 17, and 48.**

**The currently pending and amended claims are below. Please amend the claims following, wherein the deleted matter is shown by strikethrough and the added matter is shown by underlining.**

1. (Original) A cell culture composition comprising pluripotent cells and an inhibitor of at least one component of the gamma-secretase complex.
2. (Cancelled)
3. (Amended) The cell culture composition of Claim 1 [2], wherein the pluripotent cells are human cells ~~human pluripotent cells~~ are selected from the group consisting of human embryonic stem cells, human inner cell mass (ICM)/epiblast cells, human primitive ectoderm cells, and human primordial germ cells.
4. (Original) The cell culture composition of Claim 3, wherein the human cells are human embryonic stem cells.
5. (Original) The cell culture composition of Claim 1, wherein the inhibitor of at least one component of the gamma-secretase complex is selected from the group consisting of non-transition state analogues, transition state analogs, helical peptides containing  $\alpha$ -aminoisobutyric acid, Fenchylamine Sulfonamide compounds, NSAIDs, and benzodiazepines.
6. (Original) The cell culture composition of Claim 1, wherein the inhibitor comprises DAPT.
7. (Original) The cell culture composition of Claim 1, wherein the inhibitor comprises a transition state analog selected from the group consisting of III-31-C, L-685,458, and a substrate-based difluoroketone peptidomimetic.
8. (Original) The cell culture composition of Claim 7, wherein the substrate-based difluoroketone peptidomimetic is DFK-167.
9. (Original) The cell culture composition of Claim 1, wherein the cells are stabilized in a pluripotent state for at least 10 passages.

10. (Original) The cell culture composition of Claim 9, wherein the pluripotent state is determined by expression of SSEA4 and Notch1 in at least approximately 60% of the cells.
11. (Original) The cell culture composition of Claim 1, wherein less than approximately 20% of the cells express HNF4alpha after approximately 10 passages.
12. (Original) The cell culture composition of Claim 1, wherein the inhibitor of at least one component of the gamma-secretase complex is expressed from a feeder cell layer.
13. (Original) The cell culture composition of Claim 12, wherein the feeder cell layer is genetically engineered to express the inhibitor.
14. (Original) The cell culture composition of Claim 1, wherein the inhibitor of at least one component of the gamma-secretase complex inhibits Notch signaling in the pluripotent cells.
15. (Original) A cell culture composition comprising pluripotent cells and an inhibitor of Notch signaling.
16. (Cancelled)
17. (Amended) The cell culture composition of Claim 15 [~~16~~], wherein the pluripotent cells are human cells ~~human pluripotent cells are~~ selected from the group consisting of human embryonic stem cells, human inner cell mass (ICM)/epiblast cells, human primitive ectoderm cells, and human primordial germ cells.
18. (Original) The cell culture composition of Claim 17, wherein the human cells are human embryonic stem cells.
19. (Original) The cell culture composition of Claim 15, wherein the inhibitor of Notch signaling is selected from the group consisting of a gamma secretase inhibitor, and a dominant negative Notch protein.
20. (Original) The cell culture composition of Claim 19, wherein the dominant negative Notch protein comprises an extracellular domain of one or more Notch proteins or a portion thereof.
21. (Original) The cell culture composition of Claim 15, wherein the cells are stabilized in a pluripotent state for at least 10 passages.

22. (Original) The cell culture composition of Claim 21, wherein the pluripotent state is determined by expression of SSEA4 and Notch1 in at least approximately 60% of the cells.
23. (Original) The cell culture composition of Claim 15, wherein less than approximately 20% of the cells express HNF4alpha after approximately 10 passages.
24. (Original) The cell culture composition of Claim 15, wherein the inhibitor of Notch signaling is expressed from a feeder cell layer.
25. (Original) The cell culture composition of Claim 24, wherein the feeder cell layer is genetically engineered to express the inhibitor.
26. (Cancelled)
27. (Cancelled)
28. (Cancelled)
29. (Cancelled)
30. (Cancelled)
31. (Cancelled)
32. (Cancelled)
33. (Cancelled)
34. (Cancelled)
35. (Cancelled)
36. (Original) A method of stabilizing human pluripotent cells, comprising
  - a. providing a human feeder layer wherein the feeder layer expresses an inhibitor of Notch signaling, wherein the inhibitor of Notch signaling is selected from the group consisting of a gamma-secretase inhibitor, and a dominant negative Notch protein; and
  - b. contacting the human pluripotent cells with the human feeder layer in a culture mediumto thereby stabilize the human pluripotent cells in a pluripotent state.
37. (Original) The method of Claim 36, wherein the dominant negative Notch protein comprises an extracellular domain of one or more Notch proteins or a portion thereof.
38. (Original) The method of Claim 37, wherein the feeder layer is genetically engineered to express the inhibitor of Notch signaling.

39. (Original) The method of Claim 36, wherein the expression of the Notch inhibitor is induced by the addition of a compound to the culture medium.
40. (Cancelled)
41. (Cancelled)
42. (Cancelled)
43. (Cancelled)
44. (Cancelled)
45. (Cancelled)
46. (Original) A method of stabilizing a pluripotent cell culture, comprising:
- a. providing a pluripotent cell culture; and
  - b. contacting the pluripotent cell culture with an inhibitor of at least one component of the gamma-secretase complex
- to thereby stabilize the pluripotent cell culture.
47. (Cancelled)
48. (Amended) The method of Claim 46 [47], wherein the pluripotent cells are human cells ~~are~~ selected from the group consisting of human embryonic stem cells, human inner cell mass (ICM)/epiblast cells, human primitive ectoderm cells, and human primordial germ cells.
49. (Original) The method of Claim 48, wherein the human cells are human embryonic stem cells.
50. (Original) The method of Claim 46, wherein the inhibitor of at least one component of the gamma-secretase complex is selected from the group consisting of non-transition state analogues, transition state analogs, helical peptides containing  $\alpha$ -aminoisobutyric acid, Fenchylamine Sulfonamide compounds, NSAIDs, and benzodiazepines.
51. (Original) The method of Claim 50, wherein the inhibitor comprises DAPT.
52. (Original) The method of Claim 50, wherein the inhibitor comprises a transition state analog selected from the group consisting of III-31-C, L-685,458, and a substrate-based difluoroketone peptidomimetic.
53. (Original) The method of Claim 52, wherein the substrate-based difluoroketone peptidomimetic is DFK-167.

54. (Original) The method of Claim 50, wherein the inhibitor comprises DAPT.
55. (Original) The method of Claim 46, wherein the cells are stabilized in a pluripotent state for at least 10 passages.
56. (Original) The method of Claim 55, wherein the pluripotent state is determined by expression of SSEA4 and Notch1 in at least approximately 60% of the cells.
57. (Original) The method of Claim 46, wherein less than approximately 20% of the cells express HNF4alpha after approximately 10 passages.
58. (Original) The method of Claim 46, wherein the inhibitor is expressed from a feeder cell layer.
59. (Original) The method of Claim 58, wherein the feeder cell layer is genetically engineered to express the inhibitor.
60. (Original) The method of Claim 46, wherein the inhibitor of at least one component of the gamma-secretase complex inhibits Notch signaling in the pluripotent cells.